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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY	Czechoslovakia	REPORT	
SUBJECT	Uranium Ore Mining in the Jachymov Area	DATE DISTR.	9 May 1955
		NO. OF PAGES	6
DATE OF INFO.		REQUIREMENT NO.	RD
PLACE ACQUIRED		REFERENCES	

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

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1. The Soviet chief of the uranium ore mines in the Jachymov area was Gregorian (fnu), an Armenian who was well trained in the field of petroleum production. Gregorian formerly worked in the Caucasus district and headed a geological expedition in the Altai Mountains. 50X1-HUM Gregorian's deputy was Valcev (fnu), allegedly a Ukrainian. Czech members of the directorate general of the mines in the Jachymov area were Dr. Ing. Vladimir Honka, a geophysicist, who is said to have come from Brno, and Ludmila Sykorova, secretary to Honka. Sykorova also served as an interpreter. Grigori Bibikov, a captain (Technical Branch) of the Soviet Army, was the chief of the Bratrstvi Mine. Mining Engineer Smirnov (fnu), an export, was chief of the Svornost Mine. 50X1-HUM About 14 male and female Soviet students were attached to the Bratrstvi and Svornost mines. They were addressed as engineers, but they had not yet completed their university training. Among these was Vladimir Orsevski, a collector, and Mrs. Lyuba Korcovka, a collector, later assigned to the laboratory.

2. A Czech technician named Jan Rejsek was chief of the ore-processing plant of the Bratrstvi Mine. A Soviet foreman who was actually the superior of Rejsek worked under him. Only Czech personnel worked as assistants in the laboratory attached to the ore-processing plant of this mine. Ore-testing was exclusively conducted by Soviet nationals. Laboratories were attached only to the Bratrstvi, Elias I, and Vykmanov I Mines. There was a large ore-processing plant with an attached laboratory and testing station at Ostrov (N 51/K 70). 50X1-HUM

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STATE	X	ARM.	X	NAVY	X	AIR	X	FBI		AEC	X	OSI Ev	x	ORR	X

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(NOTE: Washington distribution indicated by "X"; Field distribution by "#".)

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3. The Soviets intended to recover all uranium ore from the waste dumps erected in the Jachymov area between 1900 and 1945. Tests made in late 1953 proved that these dumps actually contained large quantities of uranium ore. The exploitation of these dumps was scheduled to begin in mid-1954. The Soviets expected that two or three years would be required to recover all the uranium ore from these dumps.

4. Down to the deepest levels, the ore mines in the Jachymov area were intersected by layers of granite. Layers of slate were found up to a depth of from 140 to 160 meters. The most essential ore mined was pitchblende (Czech smolnik-uraninite). In Jachymov, this pitchblende contained up to 80 percent UO_2; pitchblende obtained at the Svornost Mine contained up to 85 percent UO_2. In 1953, no material containing uranium ore was dropped on dumps. Each mine car loaded with ore was checked with Geiger counters. Low-grade ore was mainly processed at the old ore-processing plant of the Bratrstvi Mine and the ore processing plant at Vykmanov. The mines in the Jachymov area were very productive. At the Bratrstvi ore-processing plant, which applied the granulation and flotation method, 800 to 1,000 x 75 to 80 kg. drums of pure concentrates were produced per month. The Bratrstvi II and Bozi Dar mines produced approximately 400 drums of concentrate per month. The informant learned from notices on bulletin boards that the output of the Svornost Mine was from 35 to 40 percent higher than the output of the Bratrstvi II Mine. In the Jachymov area, there was a total of 18 mines, the monthly output of which never dropped below 50 percent of the Bratrstvi Mine. No exact information was available on the degree of radioactivity of the ore produced at Jachymov. It was known that uranium in conjunction with gray lead ore was found near Pribram (N 50/L 53), in copper and sulphur compounds at Jilove (O 50/L 86) near Prague, and in conjunction with copper pyrites and quartz at Banska Stiavnica (Q 49/C 53) in Slovakia.

5. At the laboratories in Jachymov, precipitations and reductions with uranylnitrate $UO_2(NO_3)_2$ were made. The Soviet management of the uranium mining district had denied Czech industry production of radium, use of uranium compounds for the manufacture of uranium glass and uranium colors, and manufacture of uranium fluorescent glass. At the laboratories in Jachymov, experiments were made with reductions of small quantities with nitric acid, carbon, hydrogen, aluminum, and sodium. The number of barrels filled with concentrates delivered to the laboratories was so small, however, that industrial utilization was ruled out.

6. It was learned [redacted] that no uranium reactor was available in Czechoslovakia. All processed uranium concentrates were shipped to the USSR. Bibikov indicated that a modern uranium reactor was put into operation in the Altai Mountains in 1952. This reactor, allegedly, used graphite as a moderator. The productivity of uranium-ore mines in Czechoslovakia was on the increase, and prospecting for new uranium-ore deposits continued all over the Krusne Hory mountains, in the valleys of the drainage pattern of the Sazava River, and in the Slovakian mountains. 50X1-HUM

7. The processed uranium-ore concentrates were packed in drums, 65 cm. in diameter and 70 cm. high. The drums consisted of burnished sheet metal, 1.5 mm. thick. The lids were mechanically pressed on the drums so that they could be removed only mechanically. On the average, the full drums had a weight of 70 to 80 kg. The drums were taken from the ore-processing plants on conveyer belts to trucks which hauled most of them to the Ostrov railroad station; some of the drums were also shipped to the Jachymov railroad station. Most of the uranium-ore trains consisted of 6 to 18 cars which were escorted by from 4 to 10 Soviet soldiers who slept in the railroad cars loaded with uranium-ore barrels. Shipments of uranium ore to the USSR were made exclusively by rail. Prior to 1953, some of the trains were directed through Cop.

In 1954, uranium-ore trains were exclusively directed through Varnsdorf or Decin-Podmokly and Schandau to Cottbus in the GDR.[1] In Cottbus, cars from Czechoslovakia and cars from the Saxon uranium-ore district were assembled into complete trains for dispatch to the USSR. [redacted] trains with uranium-ore concentrates were also assembled in Frankfurt/Oder.[2] Most of the cars loaded with uranium ore in Czechoslovakia were German boxcars. 50X1-HUM

8. Work in uranium-ore mines was usually conducted in three shifts, from 0600 to 1400, from 1400 to 2200, and from 2200 to 0600. Forty-five minutes prior to the end of a shift, the hauling of rock and ore was interrupted. The release of workers was started at the lowest level. An unscheduled descent or ascent was only allowed to Russians and foremen, or to electricians in an emergency. In such an emergency, the management of the mine had to be informed by telephone. Production methods were rather ruthless. The rapid exploitation did not take into consideration the health and welfare of miners. The degree to which timber was economized endangered the safety of the galleries, and water leakage hampered mining operations. Electric light was used rather lavishly, a procedure which often led to failures in the power supply owing to overloads. The electric main was without ring conduit and had no switching facilities. The latest technical device introduced in the mines was self-loading excavators (selbstaufladende Bagger). Sorting belts were not available below ground. High bonuses were paid to induce the miners to sort the uranium ore at the working face and pack it into jute bags.

9. From trade-union notes seen on the bulletin board, from local workers, and through his own observations the informant learned that from 35 to 40 percent of the total work force of the mines worked aboveground, while the remainder worked below ground. In detail, the following information was available on the work force of the individual installations in the Jachymov area:

Bratrstvi Mine: 1,500 men below ground, three shifts with 500 men each; 268 men aboveground. The work force included 90 local workers employed below ground and 224 workers employed aboveground; 30 women worked below ground; 14 women were employed aboveground; 14-18 Soviet personnel were also attached to the mine.

Svornost Mine: 1,880 men below ground, three shifts of 600 men each, most of them convicts detained in the Svornost forced-labor camp; 300 men aboveground. The work force included 120 local workers employed below ground, 282 local workers employed aboveground, 40 women, and 11 Soviet personnel.

Bozi Dar Mine: 260 men employed below ground, 30 men employed aboveground. The work force included 15 local residents employed below ground, and 25 local residents employed aboveground.

Elias I Mine: 1,400 men working below ground, 300 men working aboveground. The work force included 60 local workers employed below ground, 46 local workers employed aboveground, 22 women, and 11 Soviet personnel.

Elias II Mine: The work force of this mine was probably included in the work force of the Elias I Mine.

Barbora Mine: 1,200 men working below ground.

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Ore-processing plant at Vykmanov: 800 men working in three shifts. The work force included 110 local workers.

It was also known that 290 convicts were transferred from the Jachymov area to Pribram. The forced-labor camp at Pribram contained 500 prisoners. About 250 convicts were sent to Jilove, and 120 convicts helped in prospecting activities in Slovakia.

10. The galleries in which mining activities were conducted were 190 to 220 centimeters high and from 2.5 to 3 meters wide. Narrow-gauge field railroad tracks were available in the galleries. A maximum of eight working levels existed in mines in the Jachymov area. The greatest depth reached was about 1,000 meters. Ventilation facilities were rather poor. All the mines suffered from water leakage, and mining operations were, therefore, rather expensive. Modern pumping plants pumped the water from level to level. Electric locomotives operated by storage batteries were employed underground. The average output per mine and shift was 230 to 260 mine carloads, except at the Svornost Mine where 340 mine carloads were hauled to the surface per shift. A total of 230 to 260 mine carloads yielded 40 carloads of ore and 20 carloads of radioactive material, while the remainder was waste material.

11. Mining operations were conducted with compressed-air drills, seldom with hammers. Donarit and Dilovol were used as explosives. Compressed-air excavators of Soviet design were also employed, especially for boring operations. Model Eikopp cutting machines arrived at the mines in 1953. US excavators were no longer in operation. The uranium content of ore lodes was tested by means of two types of Geiger counters, one of them a Lorenz-Seibt model. The ventilation in the mines was very poor. The temperature at levels 6 and 8 was up to 36°C.[3]

1. [redacted] Comment: Uranium-ore shipments via Podmokly and Schandau have not been observed in the last three years. 50X1-HUM

2. [redacted] Comment: Uranium-ore trains in the GDR are assembled in Aue, Schwarzenberg, and Buchholz, and not in Frankfurt/Oder. 50X1-HUM

3. [redacted] Comment: For location sketch of the Bratrstvi Mine, see Annex. 50X1-HUM

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Sketch of the Bratrstvi Mine

1. Main entrance for Diesel locomotives.

2. Compressor station equipped with three high-performance compressors producing an initial pressure of 10.8 atmospheres.

3. A new ore-processing plant using the flotation procedure. The plant was equipped with six shaking tables, two ball mills, and one granulating plant.

4. Sawmill.

5. Wooden duct conducting water to the ore-processing plant.

6. Transformer station of 11,000 kilowatt. The power was supplied by the power plant at Most (N 51/F 13) - Ervenice (N 51/F 12). The power supply was inadequate.

7. Cloak rooms, washing rooms, and offices. In the basement a boiler plant equipped with three boilers, and a charging plant for electric mine lamps.

8. Storage facilities for locksmith shop, engineering department, and electrical material.

9. Old ore-processing plant, three-story building equipped with two ball mills, two granulating plants, and eight shaking tables. The processing plant was attached to the OTK (Technical Controls) department.

10. Locksmith and welding shop equipped with three electric welding and autogenous sets, three mobile sets usable below ground, four lathes, one shaping machine, one milling machine, two boring mills, one boring machine; issue of tools and materials; forge equipped with two Ajax hammers, one hydraulic press and four anvils. In an adjoining room there was a weak-current plant for the signal communication installations of the complex.

11. Main laboratory and electric workshop.

12. Probably subdepartment of the OTK.

13. Entrance to the gallery of the Bratrstvi Mine.

14. Entrance to the Bozi Dar Mine.

15. Forced-labor camp.

16. Storage of ration supplies.

17. SNB billets and main guardhouse.

18. Forced-labor camp of the Bratrstvi Mine.

19. Parking lot for motor vehicles.

20. SNB barracks installations, permanently occupied by a unit of 120 men.

21. Waste dump.

Layout of Bratrstvi Mine